6199-4-1P AID:97222 | 09/02/2020

Calculate change in storage using below gievn equaction,

S = P + Qin + Iin - Qout - Iout - R - E - T

Here S represents the change in storage, P is precipitation, Qin is Inflow,  Iin  is base flow, Qout is an outflow, Iou is infiltration or seepage, R is  runoff, E is evaporation & T is transpiration

The case I -Vertical drop :

Substitute,  P is 0, Qin is 0, Iin is 0, Qout is 0, Iout is 0.01 mm/day, R is 0 , E is 6.8 mm/day & T is 0.

S = 0 + 0 + 0 + 0 - 0.01 - 0 - 6.8 - 0

S = -6.8 mm/day

Here the symbol - (minus) indicates that there is a drop in the water body.

∴ Drop = 6.81 mm/day

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**Note:** There are 31 days in August

∴ Total drop during August    = 6.81 mm x 31 days

= 211.11 mm

= 21.11 cm

= 0.21 meters

Case II: Reduction in shoreline if shore slope is 5o  :

Vertical drop is obtained as  211.11 mm from case 1, the hypotenuse in the below-given triangle  gives a reduction of shoreline here.

85O

5O

211.11 mm

= ?

∴Vertical drop is 0.21 meters & Inclined drop at 5o is 2.4 meters during August